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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,757	04/30/2001	Raymond E. Suorsa	033048-060	9176
21839	7590	03/25/2005	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			TANG, KUO LIANG J	
			ART UNIT	PAPER NUMBER
			2191	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/843,757	SUORSA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kuo-Liang J Tang	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 03 December 2004.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This Office Action is in response to the amendment filed on 12/03/2004.
2. The priority date for this application is 10/31/2000.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-27 have been considered but they are not persuasive.

Claim 13 is amended. Claims 23-27 are newly added.

Claims 1-27 are pending and have examined.

The examiner maintains double patenting and will withdraw the double patenting rejection once the examiner receives confirmation that the claim 11 of the copending application number 09/838,142 has been cancelled.

Claims 1-27 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., US Patent No. 6,067,582 (hereinafter Smith) in view of Borman et al., US Patent No. 6,708,195 (hereinafter Borman).

*In the Amendment, the Applicants argue that:*

As for independent claims 1, 10 and 18, the Applicants primarily argue that Smith does not disclose a "push" type of operation and a message that is sent "to" an agent residing on the device where the installation is to take place. (see Amendment page 9, lines 11-20).

**Examiner's response:**

The examiner disagrees with Applicants' assertion that Smith does not disclose a message that is sent "to" an agent residing on the device where the installation is to take place. In fact, Smith does teaches message that is sent "to" an agent residing on the device where the installation is to take place (E.g. see FIG. 1, electrical connection 12 over the network 14 (which is two way traffic, so the message can be sent to and from the remote computer), and plug-in module 23 (agent) residing on the device and see col. 4:31-34, col. 6:51-53). Further, the Examiner does not agree that Smith does not disclose a "PUSH" type operation. In fact, Smith teaches a "PUSH" type operation (E.g. see FIG. 2, transfer installation modules 52 and see col. 7:16-35, which states "... the plug-in module 23 is sent an enabling signal which allows transfer of installation modules 52 of the software application 20 to the remote computer 10 ..." )(Emphasis added).

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 23-27 are under the second paragraph, as being insufficient antecedent basis for this limitation in the claim.

Claim 23 line 3, recites the limitation "sending a message to an agent ...".

Claim 23 line 5, recites the limitation "sending an acknowledgement to ...".

Claim 23 line 7, recites the limitation "determining whether the acknowledgement ...".

Claim 23 line 10, recites the limitation "initiating a locking signal ...".

Claim 23 line 12, recites the limitation “providing files ...”.

Claim 23 line 14, recites the limitation “removing the locking signal ...”.

There is insufficient antecedent basis for this limitation in the claim. It could be any server or another agent or communication gateway or any device who can perform the action. Appropriate correction is required.

Claims 24-27, which depend from claim 23 are also rejected under the second paragraph of 35 U.S.C. 112 for the same reason.

For the art rejection purpose, the examiner interprets Claim 23 line 3, recites the limitation “sending a message to an agent ...”.

Claim 23 line 5, the limitation “a server sending an acknowledgement to ...”.

Claim 23 line 7, recites the limitation “an agent determining whether the acknowledgement ...”.

Claim 23 line 10, recites the limitation “an agent initiating a locking signal ...”.

Claim 23 line 12, recites the limitation “a server providing files ...”.

Claim 23 line 14, recites the limitation “an agent removing the locking signal ...”.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is

shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of co-pending Application No. 09/838,142 (hereinafter '142) respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following observation.

Instant Application claim	'142 Claim
<p>1. A method for <u>installing software</u> on a hardware device by an <u>agent</u> which resides on the hardware device comprising:</p> <p>a communication <u>network</u> gateway sending a message to an <u>agent</u> residing on the hardware device informing the <u>agent</u> of a command to <u>install software</u> on the hardware device on which it resides;</p> <p>an <u>agent</u> verifying the validity of the message sent to it with the communication <u>network</u> gateway;</p> <p>the communication <u>network</u> gateway transmitting an indication regarding the validity of the command;</p> <p>the <u>agent</u> receiving the command to <u>install software</u> on the hardware device if the indication transmitted from the gateway indicates that the command is valid;</p> <p>the communication <u>network</u> gateway initiating a <u>locking</u> signal regarding using pre-determined resources of the hardware</p>	<p>11. Method for <u>installing software</u> on a hardware device by an <u>agent</u> which resides on the hardware device comprising:</p> <p>a communication <u>network</u> gateway sending a message to an <u>agent</u> residing on the hardware device informing the <u>agent</u> of a command to <u>install software</u> on the hardware device on which it resides;</p> <p>an <u>agent</u> verifying the validity of the message sent to it with the communication <u>network</u> gateway;</p> <p>the communication <u>network</u> gateway transmitting an indication regarding the validity of the command;</p> <p>the <u>agent</u> receiving the command to <u>install software</u> on the hardware device if the indication transmitted from the gateway indicates that the command is valid;</p> <p>the communication <u>network</u> gateway initiating a <u>locking</u> signal regarding the command to <u>install software</u> on the</p>

<p>device to execute the command to <u>install software</u> on the hardware device;</p> <p>the <u>agent</u> requesting files from a file server via the communication <u>network</u> gateway required for completion of the received installation command;</p> <p>the file server sending the files required for completion of the received installation command to the <u>agent</u> via the communication <u>network</u> gateway;</p> <p>the <u>agent</u> installing the files sent to it on the hardware device upon which it resides in response to the received installation command; and</p> <p>the communication <u>network</u> gateway removing the <u>locking</u> signal associated with using the pre-determined resources of the hardware device to execute the command to <u>install software</u> in a hardware device after the files have been installed.</p>	<p>hardware device;</p> <p>the <u>agent</u> requesting files from a file server via the communication <u>network</u> gateway required for completion of the received installation command;</p> <p>the file server sending the files required for completion of the received installation command to the <u>agent</u> via the communication <u>network</u> gateway;</p> <p>the <u>agent</u> installing the files sent to it on the hardware device upon which it resides in response to the received installation command; and</p> <p>the communication <u>network</u> gateway removing the <u>locking</u> device associated with the command to <u>install software</u> in a hardware device after the files have been installed.</p>
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The limitations recited in claim 1 are obvious variations of limitation in '142 Claim 11.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., US Patent No. 6,067,582 (hereinafter Smith) in view of Borman et al., US Patent No. 6,708,195 (hereinafter Borman).

As Per Claim 1, Smith teaches that a system and method is disclosed for distributing, registering and purchasing software application and other digital information over a network. (E.g. see Abstract and associated text). In that Smith discloses the method that covering the steps of:

“a communication network gateway sending a message (E.g. see col. 4:31-34, message) to an agent (E.g. see col. 6:51-53, plug-in module 23) residing on the hardware device informing the agent of a command to install software on the hardware device on which it resides;” (E.g. see col. 6:26-34, “...a code given to the user by the plug-in module 23 is input 40...”)

“an agent verifying the validity of the message sent to it with the communication network gateway;” (E.g. see col. 6:39-60, “...the user will have the opportunity to review the assurances provided by the auditor and to verify that the installer is known to the auditor. ...”);

“the communication network gateway transmitting an indication regarding the validity of the command;” (E.g. see col. 6:3-10, “...the server module 26 transmits an enabling command to the plug-in module 23 which allows transmission of the software application 20 to the remote computer 10. ...”);

“the agent receiving the command to install software on the hardware device if the indication transmitted from the gateway indicates that the command is valid;” (E.g. see col. 6:3-10, “...the server module 26 transmits an enabling command to the plug-in module 23 which allows transmission of the software application 20 to the remote computer 10. ...”);

“the agent requesting files from a file server via the communication network gateway required for completion of the received installation command;” (E.g. see FIG.2 Installation Request 36 and associated text);

“the file server sending the files required for completion of the received installation command to the agent via the communication network gateway;” (E.g. see FIG. 2 transfer installation modules 52 and associated text, i.e. see col. 7:16-35, which states “... the plug-in module 23 is sent an enabling signal which allows transfer of installation modules 52 of the software application 20 to the remote computer 10 ...”)(Emphasis added);

“the agent installing the files sent to it on the hardware device upon which it resides in response to the received installation command;” (E.g. see col. 6:8-10) and

Smith does not explicatively disclose a locking signal / state for accessing the hardware device. However Borman, in analogous art, teaches “locking signal / state for accessing the hardware device” (E.g. see col. 1:22-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Borman into the system of Smith, to perform an user update in a multi- users environment. The modification would have been obvious because one of ordinary skill in the art would have been motivated so that in a multi-user environment, a method of controlling access to objects is

required, such that updates performed by one user are not overwritten by simultaneous updates by another user. (E.g. see Abstract).

As Per claim 2, the rejection of claim 1 is incorporated and further the combination of Smith and Borman teach:

“a device resource locking signal that prevents the gateway from sending a second command relating to pre-determined resources of the hardware device in use by the agent installing software.” (E.g. see Borman, Abstract and col. 1 34-36).

As Per claim 3 the rejection of claim 1 is incorporated and further the combination of Smith and Borman teach:

“the communication gateway entering identification information of the hardware device (E.g. see Borman, Figure 2, Object 44) id the pre-determined resources of the hardware device required to execute the command to install software on the hardware device in a table (E.g. see Borman, Figure 2, Lock Table 40) within a system database(E.g. see Borman, Figure 1, User Database 20).”

As Per claim 4 the rejection of claim 3 is incorporated and further the combination of Smith and Borman teach:

“the table within the system database operates using uniqueness constraints for hardware device identification information contained therein.” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per claim 5 the rejection of claim 4 is incorporated and further the combination of Smith and Borman teach:

“the locking signal comprises a uniqueness constraints signal.” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per claim 6 the rejection of claim 4 is incorporated and further the combination of Smith and Borman teach:

“the table within the system database (E.g. see Borman, col. 8:61 to col. 9:34, database “voice\_db”) contains uniqueness constraints regarding resource identification information contained therein (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).”

As Per claim 7 the rejection of claim 6 is incorporated and further the combination of Smith and Borman teach:

“the locking signal comprises a uniqueness constraint signal.” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per claim 8 the rejection of claim 1 is incorporated and further Smith teaches:  
“the agent installing the files according to an instruction set.” (E.g. see col. 7:35-41).

As Per claim 9 the rejection of claim 8 is incorporated and further Smith teaches:

“the instruction set comprises the received installation command.” (E.g. see col. 7:35-41).

As Per claim 10 the rejection of claim 8 is incorporated and further Smith teaches:  
“the instruction set comprises a command queue.” (E.g. see col. 7:35-41, procedure proscribed).

As Per claim 11 the rejection of claim 8 is incorporated and further Smith teaches:  
“the instruction set resides in a network database.” (E.g. see col. 5:10-15).

As Per claim 12 the rejection of claim 8 is incorporated and further Smith teaches:  
“the instruction set resides in a network file server.” (E.g. see FIG. 1 server 26 and associated text).

As Per claim 13, Smith teaches:

“the agent (E.g. col. 5-8, plug-in module 23) receiving a software command from a control network (E.g. FIG. 1 network 14 and associated text), which is part of a command queue;” (E.g. see col. 6:5-8).

“the agent executing the software command on a hardware device;” (E.g. see col. 7:35-41).

“repeating the steps of receiving, executing, and preventing by the agent until all commands of the command queue have been executed.” (E.g. see FIG. 2 installation modules 52, verify the installation 54 and associated text).

Smith does not explicatively disclose determining resources on the hardware device currently in use and a locking device. However Borman, in analogous art, teaches “determining resources on the hardware device currently in use (E.g. see col. 4:38-45) and locking device” (E.g. see col. 1:22-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Borman into the system of Smith, to prevent a software command from the command queue from being executed upon the device if a resource it requires on the device for execution of the command is in use with a locking device. The modification would have been obvious because one of ordinary skill in the art would have been motivated so that in a multi-user environment, a method of controlling access to objects is required, such that updates performed by one user are not overwritten by simultaneous updates by another user. (E.g. see Abstract).

As Per claim 14 the rejection of claim 13 is incorporated and further Smith teaches: “the agent resides on the hardware device.” (E.g. see FIG. 1 plug-in moudule 23 and associated text).

As Per claim 15 the rejection of claim 13 is incorporated and further the combination of Smith and Borman teach:

“determining all hardware device resources currently in use.” (E.g. see Borman col. 4:38-45).

As Per claim 16 the rejection of claim 13 is incorporated and further the combination of Smith and Borman teach:

“locking a group of resources on the hardware device.” (E.g. see Borman col. 9:35 to col. 10:16, container “voice\_db”).

As Per claim 17 the rejection of claim 16 is incorporated and further the combination of Smith and Borman teach:

“locking all resources on the hardware device.” (E.g. see Borman Col. 5, TABLE 1-2 and col. 9:35 to col. 10:16, container “voice\_db”).

As Per claim 18 the rejection of claim 16 is incorporated and further the combination of Smith and Borman teach:

“preventing the execution of software commands requiring one of the group of locked resources.” (E.g. see Borman col. 9:35 to col. 10:16, container “voice\_db”).

As Per claim 19 the rejection of claim 13 is incorporated and further the combination of Smith and Borman teach:

“locking a single resource on the hardware device.” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per claim 20 the rejection of claim 19 is incorporated and further the combination of Smith and Borman teach:

“preventing the execution of software commands requiring the single locked resource.” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per claim 21 the rejection of claim 13 is incorporated and further the combination of Smith and Borman teach:

“verifying the presence of a resource identification number (E.g. see Borman, col. 3:59-64, key (object name 44)) within a system database (E.g. see Borman, col. 3:59-64, Name (container name 42)).”

As Per claim 22 the rejection of claim 21 is incorporated and further the combination of Smith and Borman teach:

“each hardware device resource contained within the table of the system database is constrained by a uniqueness constraint.” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per Claim 23, Smith teaches a method for installing software on a hardware device by an agent which resides on the hardware device, comprising:

“A server (E.g. see FIG. 1, server 16, 24 and 30) sending a message (E.g. see col. 4:31-34, message and col. 6:24-26) to an agent (E.g. see col. 6:51-53, plug-in module 23) residing on

the hardware device informing the agent of a command to install software on the hardware device on which it resides" (E.g. see col. 6:26-34, "...a code given to the user by the plug-in module 23 is input 40...");

"in response to said message, an agent sending an acknowledgement (E.g. see col. 3:61 to col. 2:13, which states "... a connection can be take any ... TCP/IP is preferred ...) to a communication network gateway" (E.g. see col. 4:66 to col. 5:9);

"an agent determining whether the acknowledgement relates to a valid message (E.g. see col. 5:21-55 and col. 6:39-60, "...the user will have the opportunity to review the assurances provided by the auditor and to verify that the installer is known to the auditor. ..."), and if so transmitting a command from the gateway to the agent to install software on the hardware device (E.g. see col. 6:3-10, "...the server module 26 transmits an enabling command to the plug-in module 23 which allows transmission of the software application 20 to the remote computer 10. ...");

"a server providing files from a file server to the agent via the communication gateway" (E.g. see FIG. 2 transfer installation modules 52 and associated text);

"installing the files on the hardware device by means of said agent" (E.g. see FIG. 2 and associated text, e.g. see col. 6:22 to col. 8:1).

Smith does not explicatively disclose a locking signal / state for accessing the hardware device. However Borman, in analogous art, teaches "locking signal / state for accessing the hardware device" (E.g. see col. 1:22-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Borman into the system of Smith, to perform an user update in a multi- users environment. The

modification would have been obvious because one of ordinary skill in the art would have been motivated so that in a multi-user environment, a method of controlling access to objects is required, such that updates performed by one user are not overwritten by simultaneous updates by another user. (E.g. see Abstract).

As Per claim 24 the rejection of claim 23 is incorporated and further the combination of Smith and Borman teach:

“wherein the locking signal comprises a device resource locking signal that prevents the gateway from sending a second command relating to said resources of the hardware device (E.g. see Borman, Abstract and col. 1 34-36)”.

As Per claim 25 the rejection of claim 23 is incorporated and further the combination of Smith and Borman teach:

“wherein said locking signal is initiated and removed by said communication gateway” (Again, see as noted of Claim 23).

As Per claim 26 the rejection of claim 23 is incorporated and further the combination of Smith and Borman teach:

“wherein the locking signal comprises an entry in a table within a database that operates using uniqueness constraints for hardware device identification information contained therein” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

As Per claim 27 the rejection of claim 26 is incorporated and further the combination of Smith and Borman teach:

“wherein the locking signal comprises a uniqueness constraints signal” (E.g. see Borman, col. 8:61 to col. 9:34, object “voice\_seg\_one”).

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Correspondence Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang J Tang whose telephone number is (571) 272-3705. The examiner can normally be reached on 8:30AM - 7:00PM (Monday – Thursday). Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: 571-272-2100.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PATENT EXAMINER